

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF FLORIDA  
Miami Division

**Case Number: 1:14-cv-20529-PAS**

CAPELLA PHOTONICS, INC.,

Plaintiff,

JURY TRIAL DEMANDED

vs.

CISCO SYSTEMS, INC.,

Defendant.

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**DEFENDANT CISCO SYSTEMS, INC.'S ANSWER  
AND AFFIRMATIVE DEFENSES TO PLAINTIFF'S AMENDED COMPLAINT  
FOR PATENT INFRINGEMENT, DEMAND FOR JURY TRIAL,  
AND COUNTERCLAIM**

Defendant Cisco Systems, Inc. ("Cisco") hereby files its Answer, Affirmative Defenses, and Counterclaim to Plaintiff Capella Photonics, Inc.'s ("Capella") Amended Complaint for Patent Infringement ("Complaint"). Cisco denies the allegations and characterizations in Plaintiff's Amended Complaint unless expressly admitted in the following Paragraphs:

**PARTIES**

**RESPONSE TO PARAGRAPH 1:**

Admitted.

**RESPONSE TO PARAGRAPH 2:**

Cisco admits that it is a California corporation with its principal place of business at 170 West Tasman Dr., San Jose, CA 95134. Cisco has a place of business at 8200 NW 41st Street, Suite 400, Doral, FL 33166-4020.

## **JURISDICTION AND VENUE**

### **RESPONSE TO PARAGRAPH 3:**

Cisco admits that Capella's Complaint purports to bring an action for patent infringement under the patent laws of the United States, 35 U.S.C. §1 *et seq.* Cisco does not contest subject matter jurisdiction.

### **RESPONSE TO PARAGRAPH 4:**

Cisco admits that this Court has personal jurisdiction over Cisco for this action. Cisco admits that it conducts business in this forum. Cisco denies that it has committed any acts within this judicial district giving rise to this action, including any acts of patent infringement. Cisco denies the remaining allegations contained in Paragraph 4 of the Complaint.

### **RESPONSE TO PARAGRAPH 5:**

Cisco admits that this Court has personal jurisdiction over Cisco for this action.

### **RESPONSE TO PARAGRAPH 6:**

Cisco admits that venue is technically proper in this judicial district, but denies that it is convenient.

## **THE PATENTS IN SUIT**

### **RESPONSE TO PARAGRAPH 7:**

Cisco denies that Capella is a pioneer of optical switching technologies for use in optical transmission networks. Instead, other persons and companies developed the technology claimed by Capella in the Patents-in-Suit long before Capella's alleged invention. Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the remaining the allegations contained in Paragraph 7 of the Complaint and, therefore, denies them.

**RESPONSE TO PARAGRAPH 8:**

Denied. Capella appears to have been granted the Patents-in-Suit because Capella (through its representatives) withheld highly material prior art from the Patent Office that Capella knew anticipates or makes obvious one or more claims of each of the Patents-in-Suit, and/or by misleading the Patent Office when requesting reissue of what became the Patents-in-Suit. Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the remaining allegations contained in Paragraph 8 of the Complaint and, therefore, denies them.

**RESPONSE TO PARAGRAPH 9:**

Cisco admits that a copy of a document purporting to be the '368 patent was attached as Exhibit A to the Complaint. Cisco further admits that Exhibit A is titled Reconfigurable Optical Add-Drop Multiplexers with Servo Control and Dynamic Spectral Power Management Capabilities and that Exhibit A states on its face that it issued on May 17, 2011. Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the remaining allegations contained in Paragraph 9 and, therefore, denies them.

**RESPONSE TO PARAGRAPH 10:**

Cisco admits that a copy of a document purporting to be the '678 patent was attached as Exhibit B to the Complaint. Cisco further admits that Exhibit B is titled Reconfigurable Optical Add-Drop Multiplexers with Servo Control and Dynamic Spectral Power Management Capabilities and that Exhibit B states on its face that it issued on September 6, 2011. Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the remaining allegations contained in Paragraph 10 and, therefore, denies them.

**RESPONSE TO PARAGRAPH 11:**

Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations contained in Paragraph 11 of the Complaint and, therefore, denies them.

**FACTUAL BACKGROUND**

**RESPONSE TO PARAGRAPH 12:**

The accuracy of the allegations contained in Paragraph 12 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 12.

**RESPONSE TO PARAGRAPH 13:**

The accuracy of the allegations contained in Paragraph 13 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 13.

**RESPONSE TO PARAGRAPH 14:**

The accuracy of the allegations contained in Paragraph 14 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 14.

**RESPONSE TO PARAGRAPH 15:**

The accuracy of the allegations contained in Paragraph 15 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 15.

**RESPONSE TO PARAGRAPH 16:**

The accuracy of the allegations contained in Paragraph 16 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 16.

**RESPONSE TO PARAGRAPH 17:**

The accuracy of the allegations contained in Paragraph 17 depend on context and contain subjective assessments. Thus, Cisco lacks sufficient knowledge to form a belief as to the truth or accuracy of the allegations, and therefore, denies the allegations of Paragraph 17.

**RESPONSE TO PARAGRAPH 18:**

Cisco currently lacks knowledge or information sufficient to form a belief as to the truth of the allegations set forth in Paragraph 18 of the Complaint and, therefore, denies them.

**COUNT I**  
**(Infringement of the '368 Patent)**

**RESPONSE TO PARAGRAPH 19:**

Cisco incorporates by reference its responses to Paragraphs 1 through 18 as though fully set forth herein.

**RESPONSE TO PARAGRAPH 20:**

Denied.

**RESPONSE TO PARAGRAPH 21:**

Denied.

**RESPONSE TO PARAGRAPH 22:**

Denied.

**RESPONSE TO PARAGRAPH 23:**

Denied.

**RESPONSE TO PARAGRAPH 24:**

Denied.

**COUNT II**  
**(Infringement of the '678 Patent)**

**RESPONSE TO PARAGRAPH 25:**

Cisco incorporates by reference its responses to Paragraphs 1 through 24 as though fully set forth herein.

**RESPONSE TO PARAGRAPH 26:**

Denied.

**RESPONSE TO PARAGRAPH 27:**

Denied.

**RESPONSE TO PARAGRAPH 28:**

Denied.

**RESPONSE TO PARAGRAPH 29:**

Denied.

**RESPONSE TO PARAGRAPH 30:**

Denied.

**EXCEPTIONAL CASE**

**RESPONSE TO PARAGRAPH 31:**

Cisco incorporates by reference its responses to Paragraphs 1 through 30 as though fully set forth herein.

**RESPONSE TO PARAGRAPH 32:**

Denied. In addition, Plaintiff has not pled indirect infringement, and that portion of Paragraph 32 should be struck.

Cisco denies all allegations not specifically admitted above.

**REQUEST FOR RELIEF**

Cisco denies that Capella is entitled to any relief from Cisco whatsoever, either as requested or otherwise.

**DEMAND FOR JURY TRIAL**

Cisco requests a jury trial on all issues triable by jury.

**AFFIRMATIVE DEFENSES**

As further answer and as defenses, Cisco alleges the following:

**FIRST AFFIRMATIVE DEFENSE  
(Non-Infringement)**

Cisco does not infringe and has not infringed any valid claim of the '368 or '678 patent under any theory of infringement, including direct infringement, indirect infringement, induced infringement, contributory infringement, literal infringement, infringement under the doctrine of equivalents, or joint infringement.

**SECOND AFFIRMATIVE DEFENSE  
(Invalidity)**

Each claim of the '368 and '678 patent is invalid for failing to meet one or more of the requirements or conditions for patentability under Title 35 of the United States Code, including without limitation, §§ 101, 102, 103, and/or 112. For example, one or more claims of both Patents-in-Suit are anticipated or made obvious by the Smith patent, U.S. Patent No. 6,798,941.

**THIRD AFFIRMATIVE DEFENSE  
(Unenforceability of the Patents-in-Suit as a Result of Inequitable Conduct)**

1. The Patents-in-Suit are each unenforceable due to inequitable conduct in their procurement, the relevant facts and circumstances of which are set forth below. The Patents-in-Suit are unenforceable as a result of inequitable conduct by Capella's CEO, Larry Schwerin, and Barry N. Young, Esq., as well as possibly the other applicant(s), their attorney(s), and/or their

agent(s) and/or other person(s) involved in the preparation and/or prosecution of that patent (collectively with Mr. Schwerin and Mr. Young, the “Applicants”). Each of the Applicants was subject to the duty of disclosure under 37 C.F.R. § 1.56.

2. By way of introduction, and as pled in more detail below, Cisco alleges that said inequitable conduct comprised intentional misrepresentations and/or omissions including, without limitation the following: (1) the failure to disclose one or more references during prosecution in breach of the duty of candor and good faith required by 37 C.F.R. § 1.56 with the intent to deceive the Examiner; (2) the misrepresentation of the nature of the "mistake" on which Capella relied as a basis for re-issuing the Patents-in-Suit, with the intent to deceive the Examiner; and (3) the failure to disclose art in the Patents-in-Suit that Capella admitted was prior art in an earlier provisional patent, and then exploiting that failure to argue for the patentability of the reissued claims based on the alleged novelty of the same features disclosed in that admitted prior art. These grounds are summarized immediately below and pled in additional detail in the subsequent paragraphs for this defense.

3. With respect to the first ground for inequitable conduct, CEO Larry Schwerin, prosecuting attorney Barry N. Young, as well as possibly other Applicants, were aware of highly-relevant art that the Patent Office had previously used to reject claims of other Capella patent applications similar to the Patents-in-Suit. As explained in more detail below, an example of this art—the "Smith patent"—claims priority to September 2000, and is thus prior art to both Patents-in-Suit. The Smith patent disclosed (1) 2-dimensional (e.g., two-axis) control of micromirrors; and (2) power control using those mirrors. Capella's patent attorneys admitted that the Smith patent disclosed these features during the prosecution of other Capella patents, such as the '927 patent discussed below. This art is highly relevant because the Applicants later admitted



that, but for the same two features (2-D mirrors and power control), the Patents-in-Suit were invalid. Despite this admission, the Applicants sought and obtained re-issued claims of the Patents-in-Suit based on their representation to the Patent Office that those claims were patentable due to narrowing amendments that added nothing more than 2-D mirror control and power control.

4. With respect to the second ground for inequitable conduct, Patent Office rules and regulations required Applicants to identify the nature of the "mistake" forming the legal basis to re-issue the patents. *E.g.*, 37 CFR 1.175(a)(1). Larry Schwerin, Barry N. Young, as well as possibly other Applicants concealed and then misrepresented this "mistake" in at least two ways. As discussed below, first, the Applicants tried to avoid admitting that the pre-reissue patents were invalid, and also tried to avoid identifying the invalidating prior art. Second, after they were forced to admit the pre-issue patents were invalid, the Applicants still failed to disclose the full extent of that "mistake." Instead, as a basis for the "mistake," Applicants pointed the Patent Office to a single reference that (arguably) lacked the allegedly novel features in the amended claim limitations. At the same time, Applicants failed to identify more relevant prior art that they were aware of, and that disclosed one or more of those allegedly-novel limitations.

5. With respect to the third ground for inequitable conduct, during Capella's prosecution of the reissue Patents-in-Suit, Cappella exploited its earlier failure to disclose the full scope of the prior art. As discussed below, first, when Capella filed its original provisional application (on which it later claimed priority), Capella included a picture of a commercially-available mirror that was controllable in 2-D and admitted it was prior art. Next, when Capella filed the non-provisional application, it excised any mention of these 2-D mirrors or the fact they were prior art. Finally, Capella then took advantage of the fact that the Patent Office Examiner

would have been unlikely to review the ten-year-old provisional application. It did so by arguing for the patentability of the reissued claims because Capella had narrowed them to include 2-D mirror control, while at the same time pointing to a single prior art reference that arguably lacked 2-D control.

**First Instance of Inequitable Conduct –  
Failure to Disclose Highly-Material Prior Art and Misrepresentations that the  
Amendments to the Patents-in-Suit Corrected the Errors in the Over-Broad Claims and  
Distinguished the Prior Art**

6. On or near December 29, 2004, named inventor Joseph E. Davis signed a declaration in support of a re-issue of U.S. Patent No. 6,625,346. That re-issue—RE39,397—became the parent patent to the '678 patent-in-suit. Mr. Davis declared that he was an inventor of the '346 patent, and that the '346 patent had incorrectly failed to name him as such. At the time, Mr. Davis was President and CEO of Capella. On November 14, 2006, the PTO re-issued the '346 patent as RE39,397. Thus, Joseph Davis was substantively involved in the prosecution of Capella's patents at least as early as 2004. Joseph Davis continues to hold a position as Emeritus Board Member at Capella.

7. In or near 2005, Larry Schwerin replaced Joseph Davis as CEO of Capella. Larry Schwerin has been involved in the prosecution of Capella's patents since that time.

8. On or near January 4, 2007, a Patent Office examiner cited U.S. Patent No. 6,798,941 (the "Smith patent") during the prosecution of another Capella patent, U.S. Patent No. 7,352,927. Joseph Davis, the inventor the Patents-in-Suit in this case, was also a named inventor on the '927 patent. The Examiner (who was a different examiner than the person examining the Patents-in-Suit) rejected the majority of the claims of the '927 patent based on a combination of the Smith patent and one or more other references. Rejected claim 1 of the '927 patent recited mirrors rotatable in both a "switching axis" as well as an "attenuation axis" to control power.

9. As a named inventor of the Patents-in-Suit, Joseph Davis was involved in the prosecution of those patents. In addition, on or near March 16, 2007, Joseph Davis's involvement in the prosecution of Capella's patents continued when Mr. Davis signed a § 1.131 declaration to swear behind a prior art reference that the Examiner had cited together with the Smith patent in the prosecution of the '927 patent. Thus, Mr. Davis was aware of the Smith patent and its disclosure at least as early as 2007.

10. Despite Mr. Davis' awareness of the Smith patent, the Smith patent was never cited during the prosecution of either of the Patents-in-Suit.

11. The Smith patent is material prior art to the claims of the Patents-in-Suit. At least claim 1 of the RE42,368 Patent-in-Suit and claim 61 of the RE42,678 Patent-in-Suit is anticipated by the Smith patent. As discussed in the following paragraphs, this is shown by the fact that the Patent Office asserted (and Capella did not deny) that the Smith patent disclosed each and every one of the limitations of claim 1 of the '927 patent, and because claim 1 of the '368 Patent-in-Suit and claim 61 of the '678 Patent-in-Suit recites the same or similar limitations as claim 1 the '927 patent.

12. Claim 1 of the '927 patent, which was rejected based on the Smith reference, was narrower than claim 1 of the RE42,368 Patent-in-Suit. As shown by the color coding below, the main differences between claim 1 of the '927 patent and claim 1 of the RE42,368 were that claim 1 of the '927 patent included two limitations that claim 1 of the RE42,368 lacked—(1) an optical beam expander and relay system; and (2) reducing a non-uniform attenuation of passband due to the diffraction from the edges of the micro-mirrors.

RE42,368 Patent-in-Suit Claim 1:	Rejected '927 Patent Claim 1:
<p>1. An optical add-drop apparatus comprising an input port for an input multi-wavelength optical signal having first spectral channels; one or more other ports for second spectral channels; an output port for an output multi-wavelength optical signal;</p> <p>a wavelength-selective device for spatially separating said spectral channels; [and]</p> <p>a spatial array of beam-deflecting elements positioned such that each element receives a corresponding one of said spectral channels,</p> <p>each of said elements being individually and continuously controllable in two dimensions to reflect its corresponding spectral channel to a selected one of said ports and to control the power of the spectral channel reflected to said selected port.</p>	<p>1. Optical apparatus for switching multi-channel optical signals having spectral channels of different wavelengths, comprising:</p> <p>a plurality of input and output ports for optical signals having one or more of said spectral channels;</p> <p>an optical beam expander [sic: expander] and relay system adapted to receive the optical signals from one or more of the input ports, the anamorphic system being formed to convert the optical signals to spectral beams having a predetermined elongated beam profile;</p> <p>a wavelength separator for spatially separating the spectral beams into constituent spectral channels;</p> <p>and an array of channel micromirrors, each channel micromirror of the array being positioned to receive one of said constituent spectral channels, the micromirrors being rotatable about a switching axis to switch said one spectral channel to a selected output port;</p> <p>wherein each channel micromirror is rotatable about an attenuation axis to vary the coupling of the switched spectral channel to the selected output port to control a power level of the spectral channel output at such selected port, wherein the attenuation axis is different from the switching axis,</p> <p>wherein the channel micromirrors and/or the input or output ports and/or wavelength separator are configured to reduce a non-uniform attenuation of a passband of the apparatus due to diffraction of a spectral beam from an edge of one or more of the micromirrors, wherein the edge is substantially parallel to the attenuation axis.</p>

13. For similar reasons, Claim 1 of the '927 patent was also narrower than at least claim 61 of the RE42,678 Patent-in-Suit.

14. As the Examiner would later confirm, the Smith patent disclosed every element of claim 1 of the '927 patent except the last limitation of reducing a non-uniform attenuation of

passband—a limitation the claims of the Patents-in-Suit lack. The applicants for the '927 application did not deny this, but instead argued that it would not have been obvious to combine the Smith patent with other references. As such, the Smith patent also disclosed every claim element of at least claim 1 of the RE42,368 the Capella now asserts. Specifically, the Smith patent disclosed:

- a. An optical add-drop apparatus comprising an input port for an input multi-wavelength optical signal having first spectral channels;
- b. one or more other ports for second spectral channels;
- c. an output port for an output multi-wavelength optical signal;
- d. a wavelength-selective device for spatially separating said spectral channels;
- e. a spatial array of beam-deflecting elements positioned such that each element receives a corresponding one of said spectral channels,
- f. each of said elements being individually and continuously controllable in two dimensions to reflect its corresponding spectral channel to a selected one of said ports and to control the power of the spectral channel reflected to said selected port.

15. The provisional patent application on which the Smith patent is based (Provisional Application No. 60/234,683) shows that the priority date of the Smith patent is September 22, 2000—at least with respect to the disclosure of (1) 2-dimensional (e.g., two-axis) control of micromirrors; and (2) power control. This priority date makes the Smith patent prior art to both of the Patents-in-Suit.

16. The same '683 provisional application also shows that Capella knew that the Smith patent was prior art that was directed at the same invention that Capella later claimed in

the Patents-in-Suit. Specifically, the '683 provisional application included the following disclosure (emphasis added):

According to a preferred embodiment of the invention, the optical throughput of each wavelength channel may be controlled by using a mirror array with **elements that can be rotated in an analog fashion about two orthogonal axes**. Angular displacement in a first, switching plane, is used to perform an OXC, ADM or other switching function while **angular displacement about the orthogonal axis is used for power control**.

17. The non-provisional Smith patent that claimed priority to the '683 provisional also disclosed these features. For example, the Abstract of the Smith patent disclosed:

A multi-wavelength or white-light optical switch including an array of **mirrors tiltable about two axes, both to control the switching and to provide variable power transmission** through the switch, both for optimization and for power equalization between wavelength channels in a multi wavelength signal.

18. On or near March 23, 2007, Capella's patent attorney—Joshua D. Isenberg—filed a response to the January 4, 2007, Office Action for the '927 patent, admitting that the Smith patent "describes a bi-axial MEMS mirror design that has a frame within a frame," and noting that the Smith patent described a MEMS mirror that could both be "rotated about the switching axis so as to point at the output port of interest" and that could also be "rotated about the attenuation axis to attenuate the power of that particular optical wavelength." At least Mr. Davis and Mr. Schwerin, and possibly other Applicants were aware of this statement.

19. On or near June 20, 2007, the Examiner of the '927 patent again rejected the majority of the claims of that patent using the Smith patent in combination with one or more other references. The Examiner stated that "Smith discloses a multi-channel optical switch the structure of which discloses all of the limitations of claims 1 and 29 except for the specific limitation reducing a non-uniform attenuation of passband due to the diffraction from the edges

of the micro-mirrors." At least Mr. Davis and Mr. Schwerin, and possibly other Applicants were aware of this statement.

20. On or near August 14, 2007, Capella attorney Mr. Isenberg filed another response. That response did not deny the Examiner's statement quoted in the preceding paragraph. Capella's response also acknowledged that "Smith's micromirrors allow for a continuous range of angles of deflection using relatively compact mirrors that can be grouped in two-dimensional arrays."

21. Returning now to the prosecution of the Patents-in-Suit, at or near the time Capella filed the reissue applications that became the Patents-in-Suit, Capella was actively trying to sell its patent portfolio (including the pre-reissue versions of the Patents-in-Suit), and was likely trying to increase the perceived value of that portfolio and/or prepare it for litigation. Executives at Capella, including Larry Schwerin, would have known that the sale value of the company would be based heavily on the value of its patent portfolio.

22. On or about June 10, 2010, Capella sought re-issue of U.S. Patent Nos. RE39,397 and 6,879,750 that eventually re-issued as the Patents-in-Suit. As part of its application for re-issue of the '750 patent, on or about March 1, 2011, Capella's CEO Larry Schwerin stated that the '750 was invalid and needed to be re-issued. The only two bases provided by Mr. Schwerin for the reissues were that claim 1 was overbroad and invalid by failing to include limitations related to (1) 2-dimensional (e.g., two-axis) control of micromirrors; and (2) power control:

**"At least one error upon which reissue is based is** described as follows: Claim 1 is deemed to be too broad and invalid in view of U.S. Patent No. 6,498,872 to Bouevitch and further in view of one or more of U.S. Patent No. 6,567,574 to Ma, U.S. Patent No. 6,256,430 to Jin, or U.S. Patent No. 6,631,222 to Wagener **by failing to include limitations regarding the spatial array of beam deflecting elements being individually and continuously controllable in two dimensions to control the power of the spectral channels** reflected to selected output ports,

as indicated by the amendments to Claim 1 in the Preliminary Amendment referred to above." (emphasis added)

23. As part of Capella's application for re-issue of the RE39,397 patent, on or about December 2, 2010, Larry Schwerin made a similar representation (to that cited in the previous paragraph) regarding the reason that he claimed the RE39,397 patent was invalid.

24. By making these statements, Capella (through the Applicants) admitted that the only novel aspects of the Patents-in-Suit over the prior art for the amended claims were the two aspects of (1) 2-D mirror control; and (2) power control.

25. Applicants then amended the claims of the Patents-in-Suit, effectively narrowing all 22 claims of the RE'368 patent, and all but 23 of 67 claims of the RE'678 patent. The amendments were generally directed at two narrowing limitations: (1) 2-D mirror control; and (2) power control.

26. Despite this, by that time in 2010, Larry Schwerin, Barry N. Young, as well as possibly other Applicants such as Joseph Davis, were aware of the Smith patent, knew that the Smith patent disclosed beam deflecting elements that were continuously controllable in two dimensions to control power, and failed to disclose those facts to the Examiner of the reissue applications.

27. The information about the existence and disclosure of the Smith patent is "but-for" material information that should have been disclosed to the Patent Office during the prosecution of applications that became the Patents-in-Suit. The Examiner's reasons for allowance of both of the Patents-in-Suit included a statement that the then-cited prior art "does not teach or suggest using channel micromirrors which are both individually and continuously controllable to reflect received spectral channels to any one of the output ports and to control the power of the received spectral channels coupled to the output ports."



28. The Smith patent is prior art that is "but-for material" because the Patent Office would not have allowed one or more claims of each of the Patents-in-Suit had it been aware of the undisclosed Smith patent and the fact that the Smith patent disclosed both 2-axis mirrors and power control. Those were the sole stated limitations on which the Examiner of the Patents-in-Suit allowed all of the claims of the '368 patents and claims 2-20 and 44-67 of the '678 patent.

29. Larry Schwerin, Barry N. Young, as well as possibly other Applicants, concealed the information about the Smith patent from the Patent Office with an intent to deceive the Patent Office. One or more of the Applicants stood to profit more from selling off a company with a patent portfolio that was perceived to be relatively stronger due to the reissues.

30. Mr. Schwerin and Mr. Young also represented to the Patent Office that what became claim 1 of each of the Patents-in-Suit was patentable over the prior art because of the narrowing amendments regarding 2-axis mirrors and power control. Specifically, Applicants stated for both of the Patents-in-Suit that the "amendments correct errors and ensure that the amended claims distinguish over the prior art."

31. However, Applicants did not tell the Patent Office that the Smith patent disclosed both of the two sole alleged points of novelty in the amended claims. Larry Schwerin, Barry N. Young, as well as possibly other Applicants knew that the statement that the amended claims distinguished over the prior art was a misrepresentation, because they knew the Smith patent anticipated both of those claims.

**Second Instance of Inequitable Conduct –  
Capella's Attempts to Hide The True Nature of the "Mistake" Capella Made and Relied  
Upon as a Basis to Have the Patent Office Re-issue the Patents-in-Suit**

32. Capella's attempt to hide the true nature of the "mistake" on which it based the reissues of the Patents-in-Suit constitutes a second, independent ground for inequitable conduct.

Capella began the process of asking the Patent Office to reissue the Patents-in-Suit through the following sequence of events, which are pled in more detail below:

- a. First, Larry Schwerin, Barry N. Young, as well as possibly other Applicants attempted to avoid saying anything definitive about the "mistake" in the patents, and tried to avoid identifying problematic prior art.
- b. Second, when forced to put something on record, Applicants failed to disclose the full extent of the "mistake." Instead, they chose to disclose only some of the weaker prior art references (over which their proposed claim limitations more easily distinguished), and then disguised the deception using language such as "**at least** one error upon which reissue is based is...."

33. As Capella filed its reissue applications, the Applicants tried to avoid admitting that the patent was invalid and to avoid disclosing relevant prior art despite being required to do so by the Patent Office's rules. (*See* 37 CFR 1.175(a)(1) and MPEP § 1414.) Instead, Mr. Schwerin initially provided only the following statement in a "Reissue Application Declaration by the Assignee" :

"Claims 1,15,16 and 17 **may have** claimed more than there was a right to claim in view of the cited prior art." (emphasis added)

34. The Examiner responded by noting that Capella failed to specifically say whether the claims were overbroad, and also failed to identify even one specific error (or specific prior art) to support the reissue application (February 15, 2011, Office Action, RE'368 patent):

This recitation does not include any specific language pointed out in at least one of the independent claims which provides the basis for reissue. **The phrase "may have claimed more" also lacks sufficient specificity because it is left to the reader to determine if the claimed subject matter "may have claimed more" in view of the cited art, which is also not identified**, which is a task which lends itself to guessing or trail [*sic*] and error as to what claim language is too broad.

Applicant must identify at least one specific piece of prior art (or combination of references) in order to specifically state at least one error. (emphasis added)

35. The Examiner also noted that "[i]n addition, the oath or declaration, as filed, was printed on paper which needed toner and as a result the oath or declaration is faded and partially illegible."

36. Only after the Examiner's rejection of the original Reissue Application Declarations did Applicants file a "Replacement Reissue Application Declaration by Assignee" for each of the Patents-in-Suit. In those declarations, CEO Larry Schwerin stated that "the original Patent [was] wholly or partially inoperative or invalid for the reason that the patentee claimed more than he had a right to claim in the Patent."

37. Only after the Examiner's rejection of the Declarations did the Applicants disclose to the Patent Office that Claim 1 of each patent to be reissued was "too broad and invalid in view of U.S. Patent No. 6,498,872 to Bouevitch...." Even then, the Applicants hedged this language by noting that the problem with the Bouevitch patent was only one of possibly other errors for which Applicants sought re-issue.

38. Despite this late admission, Larry Schwerin, Barry N. Young, as well as possibly other Applicants were aware of the real "mistake" and of the Bouevitch patent prior to the first (rejected) reissue application declaration. This awareness is evident from the fact that when Applicants filed their reissue applications and the initial declarations, the Applicants also filed their amendments to the claims in a way that they could later argue avoided the Bouevitch patent. And there is no question that the Applicants knew of the Bouevitch patent prior to filing the reissue applications: as part of Capella's reissue applications, Applicants filed an Information Disclosure Statement ("IDS") for each reissue which identified the Bouevitch patent.

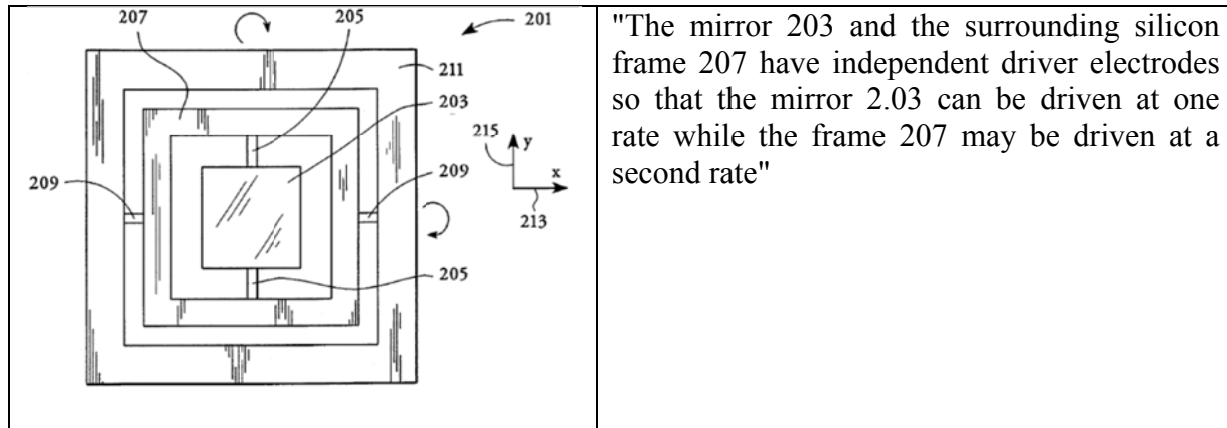
39. Although the Bouevitch patent was the reference that Applicants later focused on during the reissue process, Applicants' original reissue applications gave no notice that Bouevitch was particularly important. The IDS that Applicants filed contained over two dozen references. U.S. Patent No. 6,498,872 to Bouevitch was listed as reference number 7.

40. In addition to withholding the true nature of the "mistake" of the invalid, over-broad claims, Applicants also pointed to the Bouevitch patent as a reference that their amendments regarding (1) 2-D mirror control; and (2) power control would more easily overcome, while failing to identify other art that they knew disclosed, for example, a 2-D mirror control (e.g., the Smith patent, discussed in paragraphs 8-31, above).

41. Applicants also represented that the "the amendments [to the reissued claims] correct errors and ensure that the amended claims distinguish over the prior art." But while pointing to the Bouevitch patent (which arguably lacked 2-D mirror control), they said nothing about the Smith patent.

42. Applicants also said nothing about another reference with which they were familiar and that clearly disclosed 2-D mirror control – U.S. Patent No. 5,629,790 (the "Neukermans patent"). The Applicants knew of the Neukermans patent because they referenced and (incompletely) characterized its content in the specifications of both of the Patents-in-Suit.

43. The Neukermans patent clearly disclosed 2-D mirror control, as Applicants would have known, given the Applicants' description of the Neukermans patent in the specifications of the Patents-in-Suit (Neukermans patent at Fig. 12a, 10:17-20):

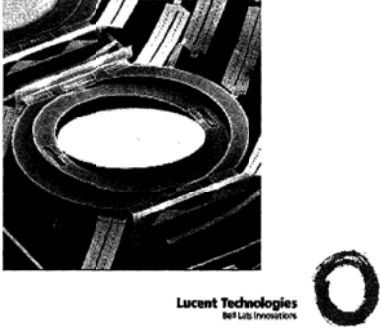


44. Despite their awareness of the disclosure of the Neukermans patent, all the Applicants said regarding the Neukermans patent was that "[t]he underlying fabrication techniques for micromachined mirrors and associated actuation mechanisms are well documented in the art, see U.S. Pat. No. 5,629,790 for example." They failed to tell the Patent Office that the reference disclosed 2-D micromachined mirrors and actuation mechanisms.

45. The Neukermans patent is prior art that is "but-for material," because the Patent Office would not have allowed one or more claims of each of the Patents-in-Suit had Applicants not misrepresented and/or omitted information related to the true disclosure of the Neukermans patent.

**Third Instance of Inequitable Conduct –  
Capella's Attempt to Exploit Their Misleading Characterization of Prior Art in the Non-Provisional Applications That They Admitted in the Provisional Showed Two-Axis Mirrors**

46. The third instance of inequitable conduct is based on the fact that at no time during the prosecution of the Patents-in-Suit or their parent patents did the Applicants say anything about what they had characterized as a "Prior Art 2-Axis Mirror" (the "Lucent 2-Axis mirror") in the provisional application to which the Patents-in-Suit claim priority. Page 24 of that provisional showed:

<p>Prior Art 2-Axis Mirror</p> 	<p>"The 2-axis dynamic mirror can take the form of a double-gimbaled torsional mirror. A single-axis torsional mirror is described in Ref. 2, while a two-axis version of such a torsional mirror is described in Ref. 3, and a version developed by Lucent Technologies is shown in Figure 17."</p>
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47. Despite acknowledging the Lucent 2-Axis mirror as prior art, Larry Schwerin, Barry N. Young, as well as possibly other Applicants, and others associated with the prosecution of the Patents-in-Suit, failed to acknowledge this Lucent technology as 2-Axis mirror prior art in the non-provisional specifications of the Patents-in-Suit.

48. By admitting the existence of this art in the provisional application, but then excising it from the non-provisional applications, the Applicants effectively hid this prior art from the Patent Office. In doing so, the Applicants took advantage of the fact that—without any reason to do so—the Examiner of the Patents-in-Suit would be unlikely to reach back and examine the provisional application that had been filed ten years earlier. Thus, by amending the claims of the Patents-in-Suit to claim 2-D mirror controls and then misdirecting the Examiner's attention to the Bouevitch patent that disclosed (arguably) only 1-D mirrors, Larry Schwerin and Barry N. Young, Esq. and possibly other Applicants purposely omitted information regarding the prior-art 2-D mirrors with an intent to mislead the Patent Office.

49. The Lucent 2-Axis mirror is prior art that is "but-for material," because the Patent Office would not have allowed one or more claims of each of the Patents-in-Suit had Applicants not misrepresented and/or omitted information related to the true disclosure of the Lucent 2-Axis

mirror. Two-axis control of mirrors was also one of only two alleged points of novelty on which the Applicants claimed the reissued Patents-in-Suit were patentable.

**Intent to Deceive the Patent Office**

50. In summary, given the above facts and circumstances, including:

- systematically withholding or obfuscating the relevance of the known prior art;
- multiple attempts to hide the real "mistakes" in the patents that were re-issued as the Patents-in-Suit; and
- amending claims to highlight distinctions over weaker, disclosed, prior art while withholding art that disclosed some or all of those same distinctions,

the actions by Larry Schwerin, Barry N. Young, as well as possibly other Applicants, and others associated with the prosecution of the Patents-in-Suit, were not caused by some mistake, but instead the single most likely explanation for these acts is that they were done with an intent to deceive the patent office and obtain patents that could be enforced against Cisco and others. The Applicants had strong motivations to do so, as they stood to profit from sale of company at a higher valuation or through a patent licensing campaign if the sale failed.

**FOURTH AFFIRMATIVE DEFENSE  
(Prosecution History Estoppel)**

Plaintiff is barred from recovery in whole or in part by the doctrine of prosecution history estoppel.

**FIFTH AFFIRMATIVE DEFENSE  
(Licensing Defense)**

Plaintiff's claims for relief are barred, in whole or in part, by the doctrines of express or implied license.

**SIXTH AFFIRMATIVE DEFENSE  
(No Right to Injunctive Relief)**

Plaintiff is not entitled to injunctive relief because any injury to it is not immediate or irreparable, and Plaintiff has an adequate remedy at law for any claims it can prove.

**SEVENTH AFFIRMATIVE DEFENSE  
(Laches)**

Plaintiff is barred by the doctrine of laches from any recovery for acts of alleged infringement occurring prior to the filing of this lawsuit.

**EIGHTH AFFIRMATIVE DEFENSE  
(Equitable Estoppel)**

Plaintiff is barred by the doctrine of laches and/or by equitable estoppel from any recovery for acts of alleged infringement occurring prior to the filing of this lawsuit.

**NINTH AFFIRMATIVE DEFENSE  
(Intervening Rights)**

Plaintiff's claims for damages for infringement are limited by the doctrine of intervening rights under 35 U.S.C. 252.

**TENTH AFFIRMATIVE DEFENSE  
(Limitations on Damages and Other Relief)**

Plaintiff's claims for relief are barred, in whole or in part, by reason of the conduct, actions, omissions and/or communications of Plaintiff and/or its predecessors-in-interest, and by operation of the applicable statutes which limit damages and other relief, including, but not limited to 35 U.S.C. §§ 287 and 288.



## **COUNTERCLAIMS**

Defendant and Counterclaimant Cisco alleges as its Counterclaims as follows:

### **THE PARTIES**

1. Cisco is a California corporation with its principal place of business at 170 West Tasman Dr., San Jose, CA 95134.

2. Capella is a Delaware corporation with a principal place of business at 5390 Hellyer Ave, San Jose, CA 95138.

### **JURISDICTION AND VENUE**

3. This is a civil action arising under Title 35 U.S.C. §§ 1 et seq. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

4. Capella has consented to jurisdiction in this district by filing suit against Defendants in this Court. Accordingly, Capella is subject to personal jurisdiction in this district.

5. Capella has asserted that venue is proper in this judicial district.

6. This Court has supplemental jurisdiction over Cisco's California state court counterclaim alleged herein pursuant to 28 U.S.C. § 1367 because the counterclaim arises in part out of the same transaction or occurrence that is the subject matter of Capella's claims.

### **FIRST CLAIM**

#### **(Unfair Competition under California Business and Professions Code § 17200 et seq.)**

7. Cisco repeats and realleges the averments in all the paragraphs above as though fully set forth herein. Specifically, Cisco repeats and realleges the averments in its Third Affirmative Defense, paragraphs 1–50, regarding Capella's inequitable conduct, fraudulent procurement of the patents, and knowledge and awareness of prior art that invalidates the patents.

8. California Business and Professions Code Sections 17200 et seq. prohibit any business from engaging in unfair competition, which is defined as any unlawful, unfair, or fraudulent business act or practice.

9. Capella's actions, including those described above in Cisco's Answer, as well as Capella's fraudulent business and practices constitute unfair competition in violation of the laws of the State of California.

10. By these actions, Capella has engaged in unfair competition in violation of the statutory laws of the state of California including California Business and Professions Code § 17200 et seq., and, as a result, Cisco has suffered and will continue to suffer damage to its business, reputation and goodwill.

11. Capella used and is using its false assertion of patent validity in its enforcement and/or offers of the invalid patents against Cisco and other enforcement targets to gain royalties, licenses, and standing to file litigation.

12. Capella's suit against Cisco is objectively baseless. This is evidenced at least by Capella's false statements to the Patent Office, and by statements in Capella's Complaint that "Capella holds the right to sue and to recover damages for infringement," each of which is both objectively false, and (given Capella's knowledge of invalidating prior art) made with knowledge of its falsity.

13. Capella committed fraudulent business acts or practices by deceptively and fraudulently obtaining patent rights and then, in bad faith, (1) misrepresenting the validity of the patents, which it knew to be false; (2) asserting those patents against Cisco and other manufacturers; (3) filing this lawsuit; and (4) attempting to sell Capella to other California businesses based in part on the fraudulently-obtained patent rights. As part of these acts, Capella attempted to enforce patents whose claims Capella (by itself or by its representatives), (1) knew to be overbroad and invalid in light of prior art, and that (2) Capella knowingly obtained through fraud on the Patent Office.

14. As a direct, proximate, and foreseeable result of Capella's bad faith representations and enforcement of fraudulently-obtained patents, Cisco has suffered, and is suffering, harm, including, for example, financial damages due to Cisco's need to investigate Capella's claims, including research to discover the fraudulent nature of Capella's activities to

obtain the Patents-in-Suit. Cisco has also suffered harm from the need to divert the time and attention of its employees from their regular roles and responsibilities to other research and planning related to Capella's fraudulent claims.

15. By reason of Capella's violations of California Business and Professions Code § 17200 et seq., Cisco has been injured in its business and property including through the loss of past, present, and future profits, by the potential loss of customers and potential customers, and/or by the loss of goodwill and product image.

16. Cisco has suffered irreparable injury by reason of the acts, practices and conduct of Capella alleged above and will continue to suffer such injury until and unless the Court enjoins such acts, practices, and conduct. Cisco is informed and believes that Capella will continue to do the acts alleged herein unless the Court enjoins Capella. Cisco is entitled to relief, including an injunction and full restitution and/or disgorgement of all incremental revenues, earnings, profits, compensation, and benefits that may have been obtained by Capella from Cisco as a result of such fraudulent business acts and practices.

#### **PRAYER FOR RELIEF**

WHEREFORE, Cisco prays for judgment as follows:

(a) That Capella is not entitled to the relief prayed for in its Complaint, or to any relief whatsoever, and that the Complaint be dismissed with prejudice;

(b) That the Court adjudge this is an exceptional case and award Cisco its reasonable attorneys' fee and expenses as provided for by 35 U.S.C. §285;

(c) That this Court issue a preliminary and permanent injunction enjoining Capella, its officers, agents, servants, employees and those persons in active concert or participation with them, or any of them, from engaging in unfair competition under California Business and Professions Code § 17200 et seq.;

(d) That this court issue and order restoring Cisco the money and/or property that Capella has acquired by means of such unfair competition under California Business and Professions Code § 17203;

(e) That this court adjudge the Patents-in-Suit to be unenforceable due to Capella's inequitable conduct, laches, and/or equitable estoppel.

(f) That Cisco be awarded all costs, expenses and interest, including prejudgment interest as appropriate, as provided by 35 U.S.C. § 285; and

(g) For such additional relief as this Court may deem just and proper.

### **RESERVATION OF RIGHTS**

Cisco expressly reserves the right to allege and assert additional defenses.

Dated: May 8, 2014

Respectfully submitted,

/s/ Harvey W. Gurland, Jr., P.A.  
Harvey W. Gurland, Jr., P.A.  
Florida Bar No.: 284033  
[HWGurland@duanemorris.com](mailto:HWGurland@duanemorris.com)  
**DUANE MORRIS LLP**  
200 S. Biscayne Blvd., Suite 3400  
Miami, FL 33131-2318  
Telephone: 305-960-2200  
Facsimile: 305-397-1974

Wayne O. Stacy, Esq.  
*(admitted pro hac vice)*  
Matthew J. Leary, Esq.  
*(admitted pro hac vice)*  
**COOLEY, LLP**  
380 Interlocken Crescent, Suite 900  
Broomfield, CO 80021-8023  
Telephone: 720-566-4000  
Facsimile: 720-566-4099

*Attorneys for Defendant Cisco Systems, Inc.*

**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true and correct copy of the foregoing Defendant Cisco Systems, Inc.'s Answer to Plaintiff's Complaint and Affirmative Defenses has been filed with the Clerk of the Court this 8th day of May, 2014, by using the CM/ECF system which will send a notice of electronic filing to all counsel or parties of record on the Service List.

/s/ Harvey W. Gurland, Jr., P.A.  
Harvey W. Gurland, Jr., P.A.

**SERVICE LIST**

Ury Fischer  
[ufischer@lottfischer.com](mailto:ufischer@lottfischer.com)  
LOTT & FISCHER, PL  
355 Alhambra Circle, Suite 1100  
Coral Gables, FL 33134  
Telephone: 305-448-7089  
Facsimile: 305-446-6191

Leslie J. Lott  
[ljlott@lottfischer.com](mailto:ljlott@lottfischer.com)  
LOTT & FISCHER, PL  
355 Alhambra Circle, Suite 1100  
Coral Gables, FL 33134  
Telephone: 305-448-7089  
Facsimile: 305-446-6191

Adam Diamond  
[adiamond@lottfischer.com](mailto:adiamond@lottfischer.com)  
LOTT & FISCHER, PL  
355 Alhambra Circle, Suite 1100  
Coral Gables, FL 33134  
Telephone: 305-448-7089  
Facsimile: 305-446-6191

Robert D. Becker  
[rbecker@manatt.com](mailto:rbecker@manatt.com)  
MANATT, PHELPS & PHILLIPS, LLP  
1841 Page Mill Road, Suite 200  
Palo Alto, CA 94304  
Telephone: 650-812-1300  
Facsimile: 650-213-0260

Susanna L. Chenette  
[schenette@manatt.com](mailto:schenette@manatt.com)  
MANATT, PHELPS & PHILLIPS, LLP  
1841 Page Mill Road, Suite 200  
Palo Alto, CA 94304  
Telephone: 650-812-1300  
Facsimile: 650-213-0260

***Attorneys for Plaintiff Capella Photonics, Inc.***

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